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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/808,953	03/16/2001	Osamu Yamaguchi	204904US2SRD	5299

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EXAMINER

STREGE, JOHN B

ART UNIT	PAPER NUMBER
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2625

DATE MAILED: 04/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/808,953

Applicant(s)

YAMAGUCHI, OSAMU

Examiner

John B Strege

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/29/04.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-24 and 26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-16,20-21,23-24 is/are rejected.
- 7) ☒ Claim(s) 4,17-19,22,26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Response to Amendments/Arguments

In response to the Applicant's amendment received on 10/29/04, all requested changes to the specification and claims have been entered.

Applicant's argue that Morimoto "performs a same focusing and searching for every collating process." However, Morimoto explicitly discloses that in the collating device the attribute data is set to a magnitude of the collation frequency, and the collation may be focused to the organisms doing frequent entrance and exit of a specific area (col. 2 lines 7-14). This allows to shorten the time necessary for a search in the database (col. 1 lines 62-63). The remaining arguments are moot in view of the amendment.

Claim Objections

1. Claim 18 is objected to because of the following informalities: where the claim reads "extracted aid extraction device" (line 5) should be replaced with –extracted in said extraction device-. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. Claims 1,7-16,20-21, and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morimoto et al. USPN 6,418,235 (hereinafter "Morimoto") in view of Hendricks et al. USPN 6,738,978 (hereinafter "Hendricks").

Morimoto discloses an organism collating method and apparatus for specifying an identical person by detecting organism characteristics of a human being (col. 1 lines 5-11). The invention recites a storage means for storing attribute data classifying kinds of organisms relating to the characteristics of the organisms, an extraction means for extracting organism characteristics and attribute data from the organism, searching the registered data of organism characteristics in dimension with the attribute data, and specifying the organism by collating the search organism characteristics with the extracted organism characteristics thus allowing for the time for search to be shortened (at least col. 1 lines 42-65). The extraction device extracts face data from the individual attempting access to the system (col. 3 lines 26-35). The attribute data belongs to the registered person and/or face data, and consists of data classifying the kinds such as body type, weight, collation frequency, etc. (col. 3 line 56 – col. 4 line 3). Although Morimoto does not explicitly use the word sorting, the classification can be seen as sorting, since the registered persons are focused and searched on the basis of the attribute data. A stated one of the possible attributes that can be stored for the person is the collation frequency, thus the collation may be focused to the organisms doing frequent entrance to specific areas (col. 2 lines 7-14). If the arrival person coincides with a registered person, the collation history of the attribute data of the registered person, namely, the year, month, day, and time of the entry is stored and the collation frequency

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ratio is revised (col. 4 lines 35-40). This allows for a shortened time of search in the database (col. 1 lines 62-63).

Morimoto does not explicitly disclose that the information pieces of the registered persons are sorted in order of decreasing frequency of identification thereof. However as discussed Morimoto does search the database based on the attribute data such as the collation frequency (frequency of identification) to focus on the organisms doing frequent entrance and exit of specific areas. It is well known in database searching to sort data in order of decreasing frequency. Hendricks teaches this well known aspect by sorting a number of programs categories based on the number of times (or frequency) that the programs are accessed. Those that are accessed the most are then ranked toward the top of the list thus the list is sorted based on decreasing frequency. This allows for accurate ranking of the most frequently viewed programs (col. 40 lines 60-67).

Morimoto and Hendricks are analogous art because they share similar aspects of managing large amounts of data.

At the time of the invention it would have been obvious to one of ordinary skill in the art to use the teaching of Hendricks to sort the attribute data of the magnitude of the collation frequency in Morimoto's invention in order of decreasing frequency of identification to allow the collation to be focused on the organisms doing frequent entrance and exit of specific areas. The motivation for this is that those who are entering most frequently would receive priority in the search and the time of the search would be shortened which is in line with Morimoto's invention. Thus it would have been obvious to

one of ordinary skill in the art to combine the teaching of Hendricks with Morimoto to obtain the invention as specified in claim 1.

Claim 23 has similar limitations to claim 1, thus arguments used for the rejection of claim 1 apply equally to the rejection of claim 23.

Claim 24 has similar limitations to claim 1, thus arguments used for the rejection of claim 1 apply equally to the rejection of claim 24.

Regarding claims 7-8, as seen in figure 3 Morimoto stores information such as the name of the registered person, registration number, registration date, and as discussed above the biometric information of the person attempting access (col. 4 lines 35-40).

Regarding claim 9, Morimoto discloses that the attribute data can be set to the collation frequency so that collation may be focused to the organism doing frequent entrance and exit of a specific area (col. 5 lines 1-3).

Regarding claims 10-11, as discussed the setting of the attribute data to specific characteristics can be read as sorting. The date of entry is updated every time a user enters thus meeting the limitation of changing the information. Morimoto does not explicitly disclose computing a time required for sorting.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to determine the time required for sorting. Applicant has not disclosed that determining the time required for sorting provides an advantage, is used for a particular purpose or solves a stated problem. Furthermore it is well known to determine a sorting time. One of ordinary skill in the art, furthermore, would have expected

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Applicant's invention to perform equally well with the invention disclose by Morimoto because determining the time required for sorting does not affect the overall result of identifying the person. Therefore it would have been obvious to one of ordinary skill in the art to modify Morimoto to determine the sorting time as disclosed in claim 10.

Regarding claims 12-14, every time the user attempts entry the attribute data is searched thus automatically sorting is performed.

Regarding claim 15, the attribute data may be set to different attributes to be searched (col. 4 line 45 – col. 5 line 11).

Regarding claim 16, as discussed the extraction devices extracts face information for identification purposes. Furthermore Morimoto discloses using an identification card with a reader disposed on a line sensor to read the card (col. 4 lines (49-53)).

Regarding claims 20-21, Morimoto discloses that registered persons stored are focused and searched on the basis of the attribute data for comparison (col. 4 lines 18-20). If there are multiple registered persons then there must inherently be an order to them, and those that are not applicable to the attribute data are taken out of consideration thus performing a type of sorting. The attributes here can be read as flags.

4. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morimoto et al. USPN 6,418,235 (hereinafter "Morimoto") in view of Hendricks et al.

USPN 6,738,978 (hereinafter "Hendricks") and further in view of Yamaguchi et al. USPN 6,275,601 (hereinafter Yamiguchi").

Morimoto nor Hendricks discloses that when said identification device fails it executes retry using the specific piece of the object person which is extracted by said extraction device. It is well known to execute retry upon the failure of identification.

As seen in figure 4(a) Yamiguchi discloses that upon failure to identify a fingerprint image with a first dictionary the fingerprint is then executes retry of the comparison with another dictionary image. By adopting the multiple dictionary method into the fingerprint identification device, identification rejection based on the deformation of fingerprints caused at fingerprinting can be prevented, and an identification rate can be improved (col. 4 lines 45-50).

Morimoto and Yamiguchi are analogous art because they are from the same field of endeavor of biometric identification, and Morimoto and Hendricks have similar aspects of managing large amounts of data.

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine Morimoto, Hendricks, and Yamiguchi to execute retry upon failure. The motivation for doing so is that false negatives could be avoided and the identification rate improved. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Morimoto, Hendricks, and Yamiguchi to obtain the invention as specified in claims 3 and 5.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morimoto et al. USPN 6,418,235 in view of in view of Hendricks et al. USPN 6,738,978 (hereinafter "Hendricks") and further in view of Kado et al. USPN 5,995,639 (hereinafter "Kado").

As discussed, Morimoto and Hendricks disclose the limitations of claim 1. As can be seen in figure 3 Morimoto discloses a facial region detector to obtain the interval of the eyes, position of the nose, etc. Morimoto nor Hendricks explicitly disclose that that the extraction is based on grayscale information.

Kado discloses an apparatus for identifying a person where a feature point extracting section extracts feature points from the stored face image (col. 3 lines 34-35). The face image is divided into many small patches and the average brightness of each patch (grayscale) is used for identification purposes (col. 4 lines 2-6).

Morimoto and Kado are analogous art because they are from the same field of endeavor of identifying a person using facial image processing and Morimoto and Hendricks are analogous art because they share similar aspects of managing large amounts of data.

At the time of the invention it would have been obvious at the time of the invention to one of ordinary skill in the art to combine Morimoto, Hendricks, and Kado to obtain a facial matching step that extracts a feature of the user based on grayscale values. The motivation for making this combination is that grayscale allows for less memory to store the image thus freeing more memory space. Therefore it would have

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been obvious to one of ordinary skill in the art to combine Morimoto and Kado in order to obtain the invention as specified in claim 6.

Allowable Subject Matter

6. Claims 4,17-19,22 and 26 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. Note that the correction to the objection of claim 18 must also be included.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

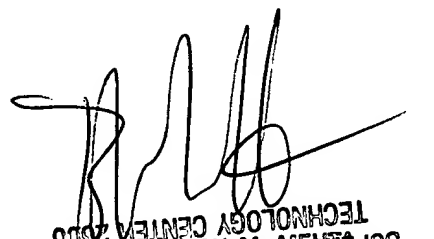
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B Strege whose telephone number is (571) 272-7457. The examiner can normally be reached on Monday-Friday between the hours of 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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